CASE REPORT ISOLATED GASTRIC TUBERCULOSIS MIMICKING MALIGNANCY

Wasim Memon, Saad Siddiqui

Department of Radiology, Aga Khan University, Karachi-Pakistan

Isolated tuberculosis of upper gastrointestinal tract is a rare pathology, often mimicking malignancy in clinical presentation and radiological features. We present a case of middle aged gentleman with isolated tuberculosis of stomach, proven on histopathology and showing remarkable improvement on follow up.

Keywords: Tuberculosis; Computed Tomography; Stomach; Gastric carcinoma J Ayub Med Coll Abbottabad 2016;28(4):814–5

INTRODUCTION

Isolated tuberculosis of upper gastrointestinal tract is rare entity and is usually seen а in immunocompromised patients.¹ These cases are a diagnostic challenge as most closely mimic malignancy. The clinical presentation could be secondary to alarming symptoms like weight loss or dysphagia however sometimes the first presentation could be complication like perforation or gastric outlet obstruction.² In this case we present a case of isolated gastric tuberculosis in an immunocompetent patient.

CASE

A 53 years old gentleman presented to clinic with complaints of low grade fever and epigastric discomfort for past 2 months. There was also history of weight loss of 8 kg over past 2 months. His comorbid diagnosis included hypertension and history of nephrolithiasis. Family history was positive for prostatic carcinoma. On Examination he had a height of 162 cm with a weight of 71.5 Kg. He had a B.P of 150/100 mmHg, pulse rate of 98/min, temperature of 36.6 °C and respiratory rate of 20/min. General Physical and systemic examinations were essentially unremarkable.

A CT scan was then ordered for evaluation which revealed diffuse thickening of gastric wall involving regions of antrum and lesser curvature. There was significant infiltration in surrounding mesenteric fat which was also encompassing fundus of gall bladder. The maximum wall thickness measured 21 mm in width without any luminal narrowing (Figure-1). No pulmonary infiltration was seen in sections acquired from chest. A suspicion for malignancy was raised and endoscopic as well as CT guided biopsies were performed from the soft tissue thickening.

Histopathology report from multiple core biopsies revealed fibro adipose tissue exhibiting wellformed granulomas composed of epithelioid histiocytes along with acute and chronic inflammation & foci of necrosis. No evidence of malignancy was seen.

Patient was started on Anti-tuberculosis therapy. CT scan was repeated after 3 months which showed significant reduction in antral wall thickening from 21-10 mm. Previously noted nodular fat infiltration adjacent to antral wall and gall bladder fossa had almost completely resolved (Figure-2). Appearances were consistent with remarkable improvement in disease. No abdominopelvic lymphadenopathy, peritoneal disease or ascites was noted on repeat CT as well. Patient also reported improvement in clinical symptoms and had a documented weight gain of 1.5 Kg in three months.

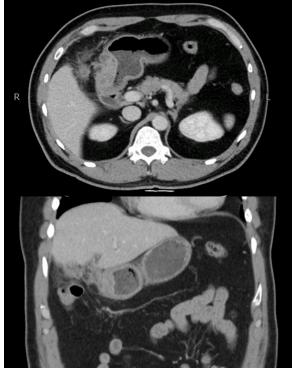


Figure-1: Axial & Coronal sections from upper abdomen showing gastric wall thickening and surrounding fat infiltration.

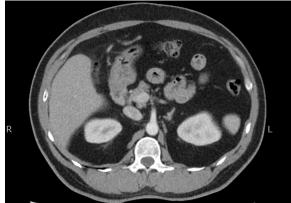


Figure-2: Axial section from upper abdomen showing decrease in gastric wall thickening as well as resolution of fat infiltration

DISCUSSION

Isolated tuberculosis of upper gastrointestinal tract (GI) is a rarely seen entity even in regions where tuberculosis is endemic.^{2,3} Bactericidal property of gastric acid, scarcity of lymphoid tissue in the gastric wall and intact gastric mucosa of the stomach are proposed as mechanisms for scarcity of this condition.²

Radiological investigations including CT are sensitive in detecting the local burden of pathology i.e. extent of involvement, surrounding infiltration as well as complications like perforation. However, most of the radiological features in these cases are indistinguishable from primary malignant lesions of upper GI and therefore warrant confirmation by histopathology.^{2,4}

In our case as well as published literature, all patients showed remarkable improvement with Anti-tuberculosis chemotherapy both clinically and follow up imaging.^{2,4,5}

CONCLUSION

Isolated tuberculosis of upper GI tract may present as a diagnostic challenge, warranting need for sound knowledge among clinicians, radiologists and pathologists for this potential pathology.

REFERENCES

- Brody JM, Miller DK, Zeman RK, Klappenbach RS, Jaffe MH, Clark LR, *et al.* Gastric tuberculosis: A manifestations of acquired immunodeficiency syndrome. Radiology 1986;159:347–8.
- Mukhopadhyay M, Rahaman MQ, Mallick NR, Khan D, Roy S, Biswas N. Isolated gastric tuberculosis: a case report and review of literature. Indian J Surg 2010;72(5):412–3.
- 3. Momin RN, Chong VH. Oesophageal tuberculosis: rare but not to be forgotten. Singapore Med J 2012;53(9):e192–4.
- Khan FY, AlAni A, Al-Rikabi A, Mizrakhshi A, Osman Mel M. Primary gastric fundus tuberculosis in immunocompetent patient: a case report and literature review. Braz J Infect Dis 2008;12(5):453–5.
- Chawla I, Aery V, Singh K, Singla B, Singh V. Duodenal tuberculosis presenting as gatric outlet obstruction. J Surg Case Rep 2012;2012(7):13.

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Address for Correspondence:

Dr. Saad Siddiqui, Radiology Department, Aga Khan University, Karachi 74800-Pakistan Cell: +92 321 906 3099

Email: saadsiddiqui.5@gmail.com